

CLAIMS

What is claimed is:

1. A communication method for use between a local modem and a host while said local modem is in communication with a remote modem through a central office,
5 said method comprising the steps of:

receiving an alert signal from said central office indicating an incoming call;

acknowledging said alter signal;

notifying said remote modem of a modem-on-hold state;

collecting caller identification received from said central office;

10 informing said host of said alert signal;

receiving an in-band caller identification request from said host for said caller
identification;

transmitting said caller identification to said host using an in-band caller
identification message; and

15 receiving an in-band answer request from said host to answer said incoming call.

2. The method of claim 1 further comprising the step of receiving a hold
acknowledgement from said remote modem in response to said notifying step.

3. The method of claim 2, wherein said hold acknowledgment includes a
hold time, and wherein said method further comprising the steps:

20 receiving an in-band hold time request from said host; and

transmitting said hold time to said host using an in-band hold time message.

4. The method of claim 1 further comprising the step of requesting said
remote modem to enter said modem-on-hold state.

5. The method of claim 1, wherein said step of informing uses a ring signal to inform said host of said alert signal.

6. The method of claim 1, wherein said step of informing uses an in-band ring message to inform said host of said alert signal.

5 7. The method of claim 1 further comprising the steps of:
receiving a disconnect reply from said remote modem in response to said notifying step; and

transmitting a disconnect request to said remote modem after said host informs said local modem of its desire to answer said incoming call.

10 8. A local modem in communication with a host, said local modem further in communication with a remote modem through a central office, said local modem comprising:

an alert signal detector capable of detecting an alert signal from said central office indicating an incoming call;

15 a processor controlling a host receiver, a host transmitter, a modem receiver and a modem transmitter, said processor having an in-band controller;

wherein said processor acknowledges said alert signal, said modem transmitter notifies said remote modem of a modem-on-hold state, said processor collects caller identification received by said modem receiver from said central office, said processor
20 informs said host of said alert signal, said in-band controller receives an in-band caller identification request via said host receiver from said host, said in-band controller transmits said caller identification to said host using an in-band caller identification message via said host transmitter, and said in-band controller receives an in-band answer request via said host receiver from said host to answer said incoming call.

9. The local modem of claim 8, wherein said processor receives a hold acknowledgement via said modem receiver from said remote modem in response to said modem-on-hold state notification.

10. The local modem of claim 9, wherein said hold acknowledgment includes a hold time, and wherein said in-band controller receives an in-band hold time request via said host receiver from said host, and said in-band controller transmits said hold time to said host using an in-band hold time message via said host transmitter.

11. The local modem of claim 8, wherein said processor requests said remote modem to enter said modem-on-hold state.

12. The local modem of claim 8, wherein said processor uses a ring signal to inform said host of said alert signal.

12. The local modem of claim 7, wherein said processor uses an in-band ring message to inform said host of said alert signal.

14. A computer program product for providing communication between a local modem and a host while said local modem is in communication with a remote modem through a central office, said computer program product comprising:

code for receiving an alert signal from said central office indicating an incoming call;

code for acknowledging said alert signal;

code for notifying said remote modem of a modem-on-hold state;

code for collecting caller identification received from said central office;

code for informing said host of said alert signal;

code for receiving an in-band caller identification request from said host for said caller identification;

code for transmitting said caller identification to said host using an in-band caller identification message; and

code for receiving an in-band answer request from said host to answer said incoming call.

5 15. The computer program product of claim 14 further comprising code for receiving a hold acknowledgement from said remote modem in response to said notifying said remote modem.

10 16. The computer program product of claim 15, wherein said hold acknowledgment includes a hold time, and wherein said computer program product further comprising:

code for receiving an in-band hold time request from said host; and

code for transmitting said hold time to said host using an in-band hold time message.

15 17. The computer program product of claim 14 further comprising code for requesting said remote modem to enter said modem-on-hold state.

18. The computer program product of claim 14, wherein said code for informing uses a ring signal to inform said host of said alert signal.

19. The computer program product of claim 14, wherein said code for informing uses an in-band ring message to inform said host of said alert signal.

20 20. The computer program product of claim 14 further comprising:

code for receiving a disconnect reply from said remote modem in response to said notifying said remote modem; and

code for transmitting a disconnect request to said remote modem after said host informs said local modem of its desire to answer said incoming call.